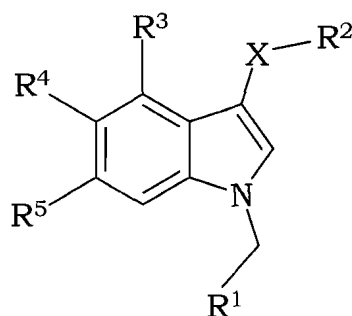


CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A compound having the formula



wherein

X is S, SO or SO₂;

R¹ is a 5- or 6-membered monocyclic, hetero- or homocyclic, saturated or unsaturated ring structure optionally substituted with one or more substituents selected from the group consisting of halogen, CN, (1C-4C)fluoroalkyl, nitro, (1C-4C)alkyl, (1C-4C)alkoxy and (1C-4C)fluoroalkoxy;

R² is 2-nitrophenyl, 2-cyanophenyl, 2-hydroxymethyl-phenyl, pyridin-2-yl, pyridin-2-yl-N-oxide, 2-benzamide, 2-benzoic acid methyl ester or 2-methoxyphenyl;

R³ is H, halogen or (1C-4C)alkyl;

R⁴ is H, OH, (1C-4C)alkoxy, or halogen;

R^5 is H, OH, (1C-4C)alkoxy, NH_2 , CN, halogen, (1C-4C)fluoroalkyl, NO_2 , hydroxy(1C-4C)alkyl, CO_2H , $CO_2(1C-6C)alkyl$, or

R^5 is NHR^6 , wherein R^6 is (1C-6C)acyl optionally substituted with one or more halogens, $S(O)_2(1C-4C)alkyl$, or $S(O)_2aryl$ optionally substituted with (1C-4C)alkyl or one or more halogens, or

R^5 is $C(O)N(R^8, R^9)$, wherein R^8 and R^9 each independently are H, (3C-6C)cycloalkyl, or CH_2R^{10} , wherein R^{10} is H, (1C-5C)alkyl, (1C-5C)alkenyl, hydroxy(1C-3C)alkyl, (1C-4C)alkylester of carboxy(1C-4C)alkyl, (1C-3C)alkoxy(1C-3C)alkyl, (mono- or di(1C-4C)alkyl)aminomethyl, (mono- or di(1C-4C)alkyl)aminocarbonyl, or a 3-, 4-, 5- or 6-membered monocyclic, homo- or heterocyclic, aromatic or non-aromatic ring, or R^8 and R^9 form together with the N a heterocyclic 5- or 6-membered saturated or unsaturated ring optionally substituted with (1C-4C)alkyl; or a salt or ~~hydrate form~~ thereof.

2. (Previously Presented) The compound according to claim 1, wherein,

R^1 is a 5- or 6-membered monocyclic, hetero- or homocyclic, saturated or unsaturated ring structure optionally substituted with one or more substituents selected from the group consisting of halogen, CN, CF_3 , nitro, methoxy, trifluoromethoxy and methyl;

R^2 is 2-nitrophenyl, 2-cyanophenyl, 2-hydroxymethyl-phenyl, pyridin-2-yl, pyridin-2-yl-N-oxide, 2-benzamide, 2-benzoic acid methyl ester or 2-methoxyphenyl;

R^3 is H, halogen or (1C-2C)alkyl;

R^4 is H or F.

3. (Previously Presented) The compound according to claim 2, wherein,

R^5 is H, OH, (1C-4C)alkoxy, CN, halogen, (1C-4C)fluoroalkyl, NO_2 , hydroxy(1C-4C)alkyl, $\text{CO}_2(1\text{C-}6\text{C})$ alkyl, or

R^5 is NHR^6 , wherein R^6 is (1C-6C)acyl optionally substituted with one or more halogens, $\text{S(O)}_2(1\text{C-}4\text{C})$ alkyl, or S(O)_2 aryl optionally substituted with (1C-4C)alkyl or one or more halogens, or

R^5 is $\text{C(O)N(R}^8, \text{R}^9)$, wherein R^8 and R^9 each independently are H, (3C-6C)cycloalkyl, or CH_2R^{10} , wherein R^{10} is H, (1C-5C)alkyl, (1C-5C)alkenyl, hydroxy(1C-3C)alkyl, (1C-4C)alkylester of carboxy(1C-4C)alkyl, (1C-3C)alkoxy(1C-3C)alkyl, (mono- or di(1C-4C)alkyl)aminomethyl, (mono- or di(1C-4C)alkyl)-aminocarbonyl, or a 3-, 4-, 5- or 6-membered monocyclic, homo- or heterocyclic, aromatic or non-aromatic ring, or R^8 and R^9 form together with the N a heterocyclic 5- or 6-membered saturated or unsaturated ring optionally substituted with (1C-4C)alkyl.

4. (Previously Presented) The compound according to claim 3, wherein,

R^3 is H or halogen;

R^4 is H;

R^5 is H, OH, (1C-4C)alkoxy, CN, F, Cl, CF_3 , NO_2 , hydroxy(1C-4C)alkyl, $\text{CO}_2(1\text{C-}6\text{C})$ alkyl, or

R^5 is NHR^6 , wherein R^6 is (1C-3C)acyl optionally substituted with one or more halogens or

R^5 is $\text{C(O)N(R}^8, \text{R}^9)$, wherein R^8 and R^9 each independently are H, (3C-5C)cycloalkyl, or CH_2R^{10} , wherein R^{10} is H, (1C-5C)alkyl, (1C-5C)alkenyl, hydroxy(1C-3C)alkyl, (1C-2C)alkylester of carboxy(1C-2C)alkyl, (1C-3C)alkoxy(1C-3C)alkyl, (mono- or di(1C-4C)alkyl)aminomethyl, (mono- or di(1C-4C)alkyl)aminocarbonyl, (3C-5C)cycloalkyl, or a 5-membered heterocyclic ring.

5. (Previously Presented) The compound according to claim 4, wherein,

X is S or SO₂;

R² is 2-nitrophenyl, 2-hydroxymethyl-phenyl, 2-benzamide, 2-methoxyphenyl, 2-cyanophenyl or pyridin-2-yl;

R³ is H or F;

R⁵ is H, OH, (1C-2C)alkoxy, CN, F, Cl, CF₃, NO₂, hydroxy(1C-4C)alkyl, CO₂(1C-4C)alkyl, or

R⁵ is NHR⁶, wherein R⁶ is formyl, acetyl, fluoroacetyl, difluoroacetyl, or trifluoroacetyl, or

R⁵ is C(O)N(R⁸,R⁹), wherein R⁸ is H, and R⁹ is H, cyclopropyl or

R⁹ is CH₂R¹⁰, wherein R¹⁰ is H, (1C-2C)alkyl, hydroxy(1C-2C)alkyl, methoxy(1C-2C)alkyl, cyclopropyl.

6. (Previously Presented) The compound according to claim 5, wherein,

X is S;

R¹ is 3,5-difluorophenyl, pyridin-2-yl, pyridin-3-yl, pyrimidin-5-yl, pyrimidin-4-yl, pyrazin-2-yl, 3-fluorophenyl, 3-cyanophenyl, or 3-nitrophenyl;

R² is 2-nitrophenyl, 2-hydroxymethyl-phenyl, 2-methoxyphenyl, 2-cyanophenyl or pyridin-2-yl;

R³ is H;

R⁵ is OH, (1C-2C)alkoxy, CN, CF₃, NO₂, hydroxy(1C-4C)alkyl, CO₂(1C-4C)alkyl, or NHR⁶, wherein R⁶ is formyl, acetyl, fluoroacetyl, difluoroacetyl, or trifluoroacetyl.

7. (Previously Presented) The compound according to claim 6, wherein,

R¹ is 3,5-difluorophenyl, pyridin-2-yl, pyridin-3-yl, pyrimidin-5-yl, pyrimidin-4-yl, or pyrazin-2-yl;

R² is 2-nitrophenyl, or 2-hydroxymethyl-phenyl;

R⁵ is OH, (1C-2C)alkoxy, CN, hydroxy(1C-4C)alkyl, or NHR⁶, wherein R⁶ is formyl, acetyl, fluoroacetyl, difluoroacetyl, or trifluoroacetyl.

8. (Previously Presented) The compound according to claim 7, wherein,

R¹ is 3,5-difluorophenyl, pyridin-2-yl, pyridin-3-yl, pyrimidin-5-yl, or pyrimidin-4-yl;

R² is 2-nitrophenyl;

R⁵ is OH, (1C-2C)alkoxy, CN, or NHR⁶, wherein R⁶ is formyl, acetyl, fluoroacetyl, difluoroacetyl, or trifluoroacetyl.

9. (Previously Presented) The compound according to claim 8 selected from the group consisting of

6-Methoxy-3-(2-nitro-phenylsulfanyl)-1-pyrimidin-5-ylmethyl-1*H*-indole, 3-(2-Nitro-phenylsulfanyl)-1-pyridin-2-ylmethyl-1*H*-indole-6-carbonitrile, 3-(2-Nitro-phenylsulfanyl)-1-pyridin-2-ylmethyl-1*H*-indole-6-carbonitrile-hydrochloride, 3-(2-Nitro-phenylsulfanyl)-1-pyrimidin-5-ylmethyl-1*H*-indole-6-carbonitrile, 3-(2-Nitro-phenylsulfanyl)-1-pyrimidin-4-ylmethyl-1*H*-indole-6-carbonitrile, *N*-[1-(3,5-Difluoro-benzyl)-3-(2-nitro-phenylsulfanyl)-1*H*-indol-6-yl]-2-fluoro-acetamide, and *N*-[3-(2-Nitro-phenylsulfanyl)-1-pyrimidin-5-ylmethyl-1*H*-indol-6-yl]-formamide.

10. (Previously Presented) The compound according to claim 5, wherein,

X is S;

R¹ is 3,5-difluorophenyl, pyridin-2-yl, pyridin-3-yl, 3-fluorophenyl, 3-cyanophenyl, or 3-nitrophenyl;

R² is 2-nitrophenyl, 2-hydroxymethyl-phenyl, 2-methoxyphenyl, 2-cyanophenyl or pyridin-2-yl;

R³ is H;

R⁵ is C(O)N(R⁸,R⁹), wherein R⁸ is H, and R⁹ is H, or CH₂R¹⁰, wherein R¹⁰ is H, (1C-2C)alkyl, hydroxy(1C-2C)alkyl, or methoxy(1C-2C)alkyl.

11. (Previously Presented) The compound according to claim 10, wherein,

R¹ is 3,5-difluorophenyl, pyridin-2-yl, or pyridin-3-yl;

R² is 2-nitrophenyl, or 2-hydroxymethyl-phenyl;

R⁵ is C(O)N(R⁸,R⁹), wherein R⁸ is H, and R⁹ is CH₂R¹⁰, wherein R¹⁰ is H, or (1C-2C)alkyl.

12. (Withdrawn) The compound according to claim 11, which is 1-(3,5-Difluoro-benzyl)-3-(2-nitrophenylsulfanyl)-1*H*-indole-6-carboxylic acid methylamide.

13. (Previously Presented) The compound according to claim 4, wherein,

X is S;

R¹ is 3,5-difluorophenyl, pyridin-2-yl, pyridin-3-yl, 3-fluorophenyl, 3-cyanophenyl, or 3-nitrophenyl;

R² is 2-nitrophenyl, 2-hydroxymethyl-phenyl, 2-methoxyphenyl, 2-cyanophenyl or pyridin-2-yl;

R³ is H;

R⁵ is C(O)N(R⁸,R⁹), wherein R⁸ and R⁹ each independently are H, or CH₂R¹⁰, wherein R¹⁰ is H, (1C-5C)alkyl, (1C-5C)alkenyl, hydroxy(1C-3C)alkyl, (1C-3C)alkoxy(1C-3C)alkyl, or (mono- or di(1C-4C)alkyl)aminomethyl.

14. (Previously Presented) The compound according to claim 13, wherein,

R¹ is 3,5-difluorophenyl, pyridin-2-yl, or pyridin-3-yl;

R² is 2-nitrophenyl, or 2-hydroxymethyl-phenyl;

R⁵ is C(O)N(R⁸,R⁹), wherein R⁸ and R⁹ each independently are H, or CH₂R¹⁰, wherein R¹⁰ is H, (1C-5C)alkyl, hydroxy(1C-3C)alkyl, or (1C-3C)alkoxy(1C-3C)alkyl.

15. (Withdrawn) The compound according to claim 14, which is 1-(3,5-Difluoro-benzyl)-3-(2-nitro-phenylsulfanyl)-1*H*-indole-6-carboxylic acid dimethylamide.

16. (Canceled).

17. (Currently Amended) A pharmaceutical composition, comprising:

the compound according to claim 1 or salt thereof and a pharmaceutically acceptable carrier.

18. (Currently Amended) A method of treating an androgen-receptor related disorder in a patient in need thereof, comprising:

administering to said patient a pharmaceutically effective amount of the compound or salt thereof according to claim 1.

19. (Cancelled)

20. (Withdrawn) A method of treating an androgen insufficiency, comprising:

administering a pharmaceutically effective amount of the compound according to to claim 1 to a subject in need thereof.

21. (New) The method of claim 18, wherein the androgen-receptor related disorder is benign prostate hyperplasia.